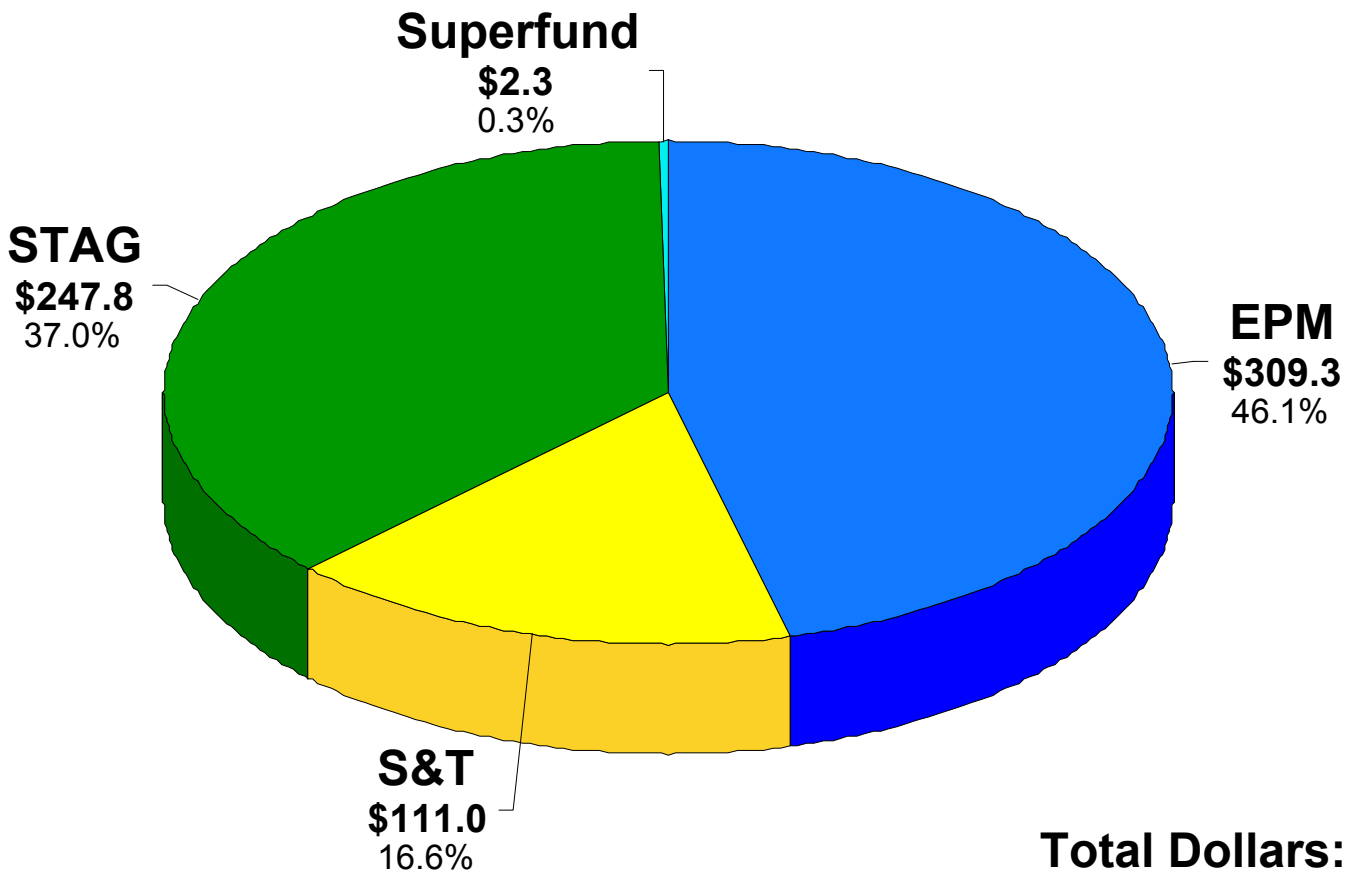
Budget Briefing
FY 2004 President's Budget

Office of Air and Radiation

Budget Request by Appropriation FY 2004

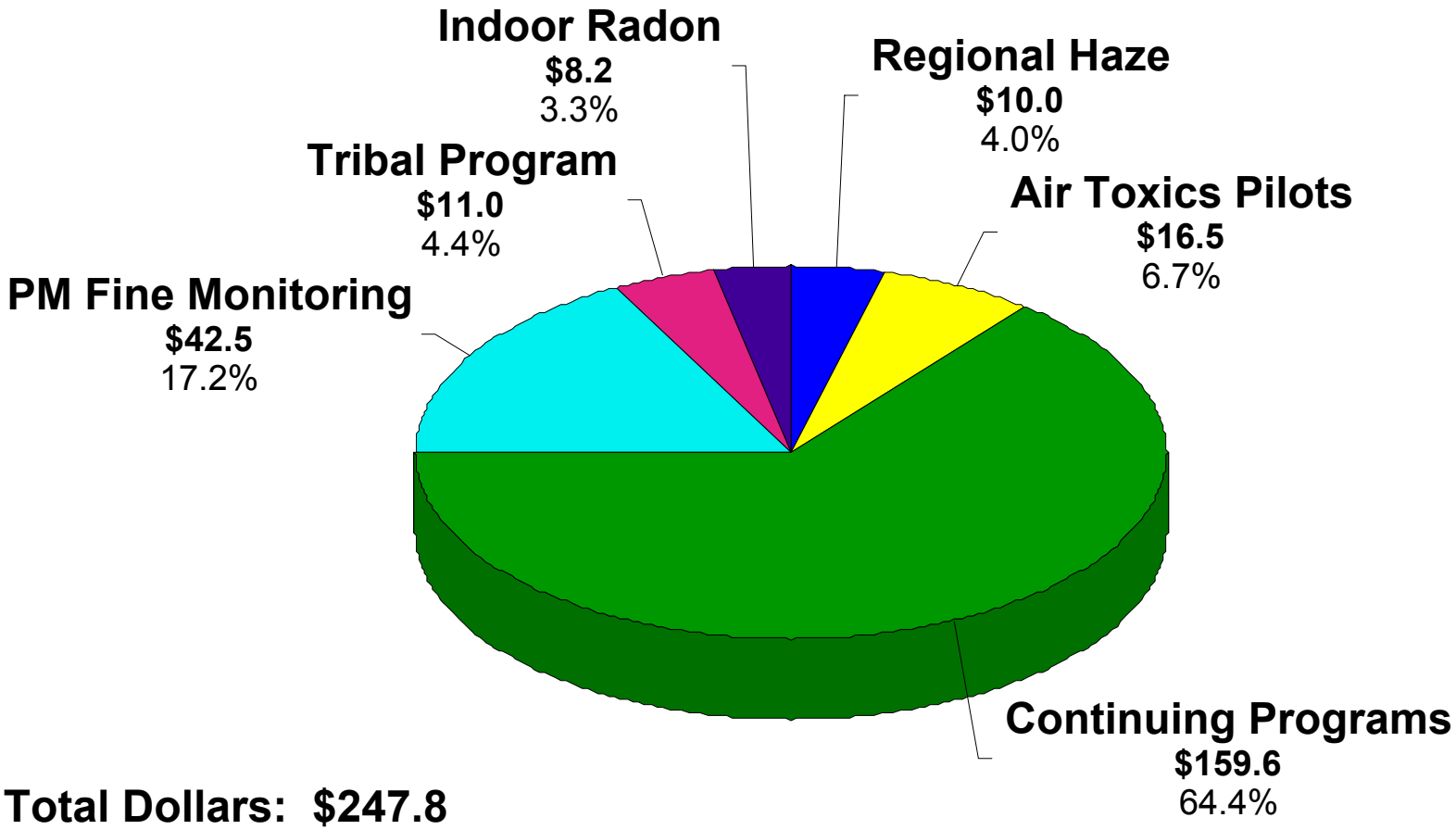
Dollars in Millions



Total Dollars: $670.4

OAR State and Tribal Air Grants – STAG FY 2004

Dollars in Millions



Total Dollars: $247.8

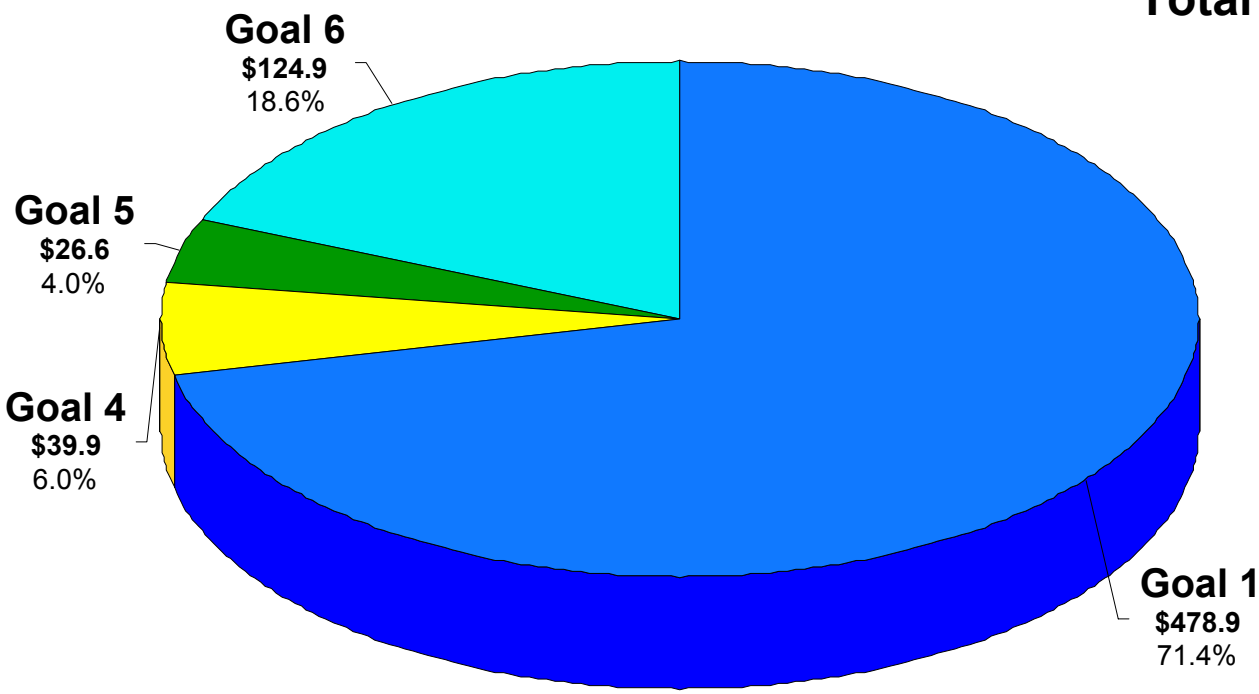
OAR Programs by Goal

- **Clean Air**
  - Includes the major Clean Air Act programs
- **Preventing Pollution and Reducing Risk in Communities, Homes, Work Places and Ecosystems**
  - Includes our indoor environments programs
- **Better Waste Management and Restoration of Contaminated Waste Sites**
  - Includes our radiation programs
- **Reduction of Global and Cross-Border Environmental Risks**
  - Includes our climate change and stratospheric ozone protection programs

Budget Request by Goal
FY 2004

Dollars in Millions

Total Dollars: $670.4



Goal 1: Clean Air
Goal 4: Preventing Pollution & Reducing Risk in Communities, Homes, Workplaces, & Ecosystems
Goal 5: Better Waste Management & Restoration of Contaminated Waste Sites
Goal 6: Reduction of Global and Cross-Border Environmental Risks

Human Health & Environmental Risks

- **Particulate Matter**
  - single greatest threat from ground-level air pollution
  - tens of thousands of premature deaths per year
  - linked to many respiratory illnesses
- **Ozone**
  - even at low levels, ozone can cause acute respiratory problems
  - repeated exposure may permanently injure the lungs
- **Indoor Air**
  - indoor pollutant levels often higher than outdoors (Americans spend 90 percent of their time indoors)
  - radon is the second leading cause of lung cancer – responsible for 15,000 to 22,000 deaths per year
- **Air Toxics**
  - large number of substances and sources
  - some persist in the environment (e.g., mercury & dioxins)
  - cause cancer, reproductive disorders, birth defects, and damage to nervous systems
- **Global Climate**
  - today, one in five Americans develops skin cancers
  - rising global temperatures could affect human health, animals and many types of ecosystems

Program Successes

- Healthier Air in More Cities
  - The number of nonattainment areas continues to decrease
  - Almost 50 percent of the areas in nonattainment with the 1-hour NAAQS in 1990 currently in attainment & with approved plans for maintaining attainment
  - 98 percent reduction in lead
- Air Toxics Reductions
  - Rules issued to date have cut toxics by 1.5 million tons per year
  - Mobile source rules have reduced toxics by 500,000 in the past 20 years
- Cleaner Cars & Cleaner Fuels
  - Average new car 90 percent cleaner than in 1970
  - 30 percent of nation's gasoline now RFG
  - Tier II and new diesel engine & fuel standards will reduce pollutants by 75 to 95 percent
- Stratospheric Ozone Protection
  - Worked with industry to phase out production of the most harmful chemicals
- Voluntary Programs
  - Tools for Schools program implemented in 10,000 schools nationwide
- Climate
  - Organizations and consumers across the country will net savings of more than $70B through 2012
  - GHG emissions will be reduced by more than 500 MMTCE

Tools for Success

- Stakeholder consultation
- Ensuring programs work together
- Sound science
- Ambitious goals with steady progress
- Flexibility with accountability
- Technical Innovation
- Voluntary programs

Program Results and Directions

- Our programs have produced results, but health and environmental risks remain

- We are at critical points in programs:
  - Major legal barriers to implementing ozone and PM NAAQS resolved
  - Transition to a risk based air toxics program
  - President's commitment to reduce intensity of greenhouse gas emissions
  - Clear Skies legislation
  - Develop nonroad diesel proposal

FY 2004 Major Changes

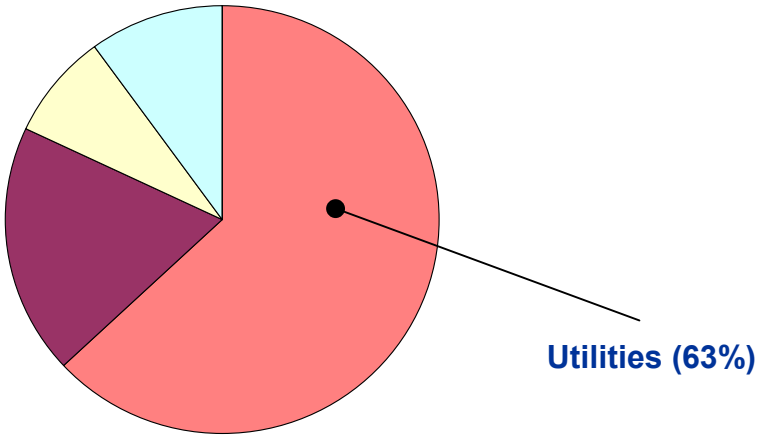
Key Programs	Dollars	Goal
Clear Skies Initiative	$5.0M	1
Air Toxics Monitoring	$7.0M	1
Motor Vehicle Certification	$8.0M	1
Laboratory Infrastructure	($14.0M)	1
Improving Indoor Air: Protecting Children's Health	$3.5M	1&4
Multi-Lateral Fund	$1.4M	6
Homeland Security	$4.1M	1&5

Clear Skies Act

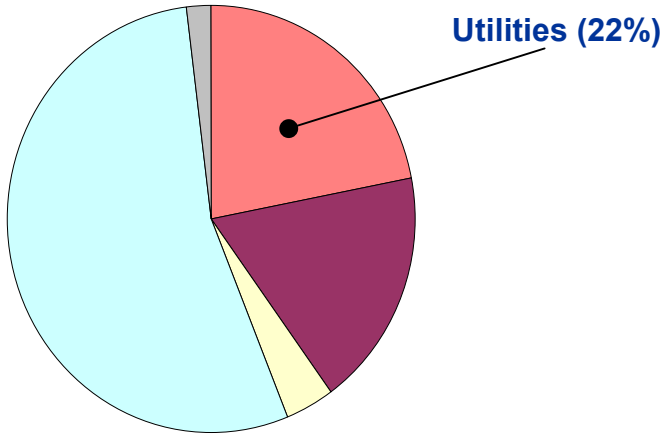
- Cuts emissions of SO_2, NO_x, mercury
- Cuts pollution faster & cheaper than current programs
- Uses market-based cap & trade approach
- Provides greater certainty for industry

Electric Power Generation: Major Source of Air Pollutants

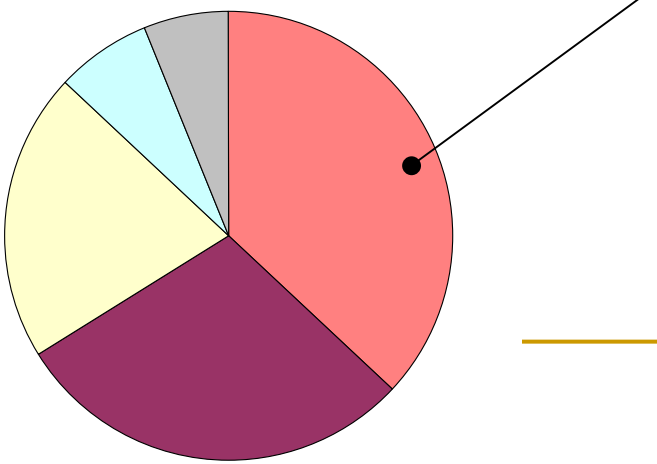
2000 Sulfur Dioxide



2000 Nitrogen Oxides



1999 Mercury



- Fuel Combustion-electric utilities
- Other stationary combustion *
- Industrial Processing
- Transportation
- Miscellaneous

* Other stationary combustion includes residential and commercial sources.

Air Toxics Monitoring

- Better characterization of the problem needed to move to a risk-based approach
- Air toxics monitoring is necessary to improve the scientific basis for understanding exposure to:
  - Hazardous air pollutants
  - Assess the resultant risk to human populations and ecosystems
  - Design an integrated air toxics program
- OAR will join with states, tribes, and local agencies to continue to put in place a national air toxics monitoring network

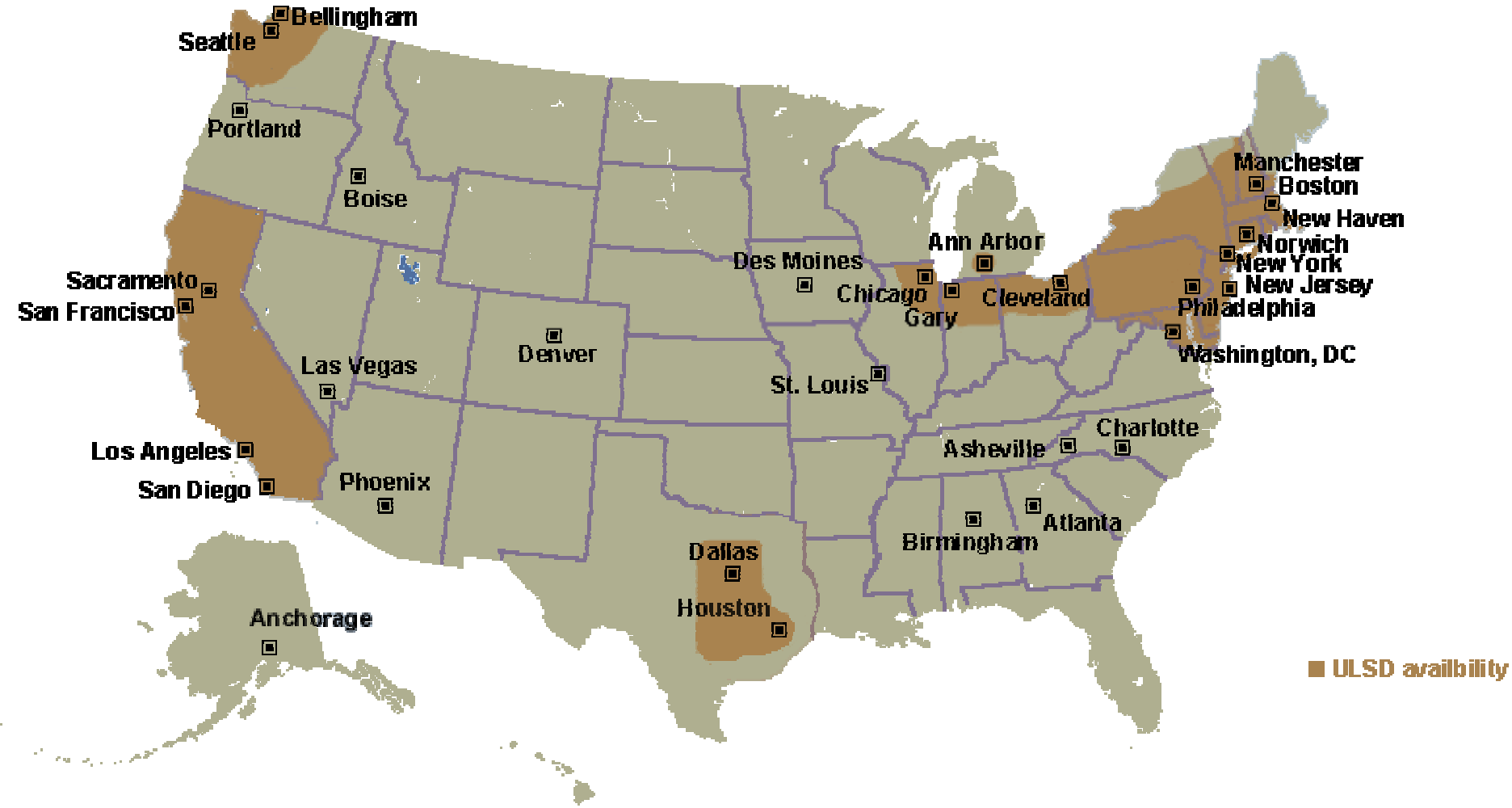
Mobile Sources

- The FY 2003 President's Budget includes a request for $14 million to purchase essential equipment to certify Tier 2 cars and SUVs and heavy duty diesel vehicles.
- With this new testing, OAR will incur new, recurring, and non-discretionary certification and compliance program costs beginning in FY 2004 for which we will be collecting increased fees.
- OAR has documented a significant workload increase. The new rules increase the testing burden as well as increasing the information management burden and costs. Testing for fine particulates from diesel cars and trucks is more complex than testing gasoline vehicles.
- EPA collects annual fees from manufacturers to cover the costs of the mobile source certification and compliance program.

Sensitive Populations

- Children are more susceptible to the effects of pollution.
- Propose to expand the Healthy School Bus campaign focused on anti-idling, early switching of buses to ultra-low sulfur diesel fuel and retrofitting or retiring older bus models. Through these approaches, diesel emissions could be reduced long before they are required by regulations that affect new buses in 2007.
- Expand efforts to reduce childhood asthma:
  - Develop State and local capacity to address sensitive populations
  - Decrease the number of asthma-related reportable health incidents and emergency room visits
  - Reduce schoolchildren's exposures to poor indoor air quality

Diesel Retrofits: 130,000 Across the Country



Diesel Retrofit Program

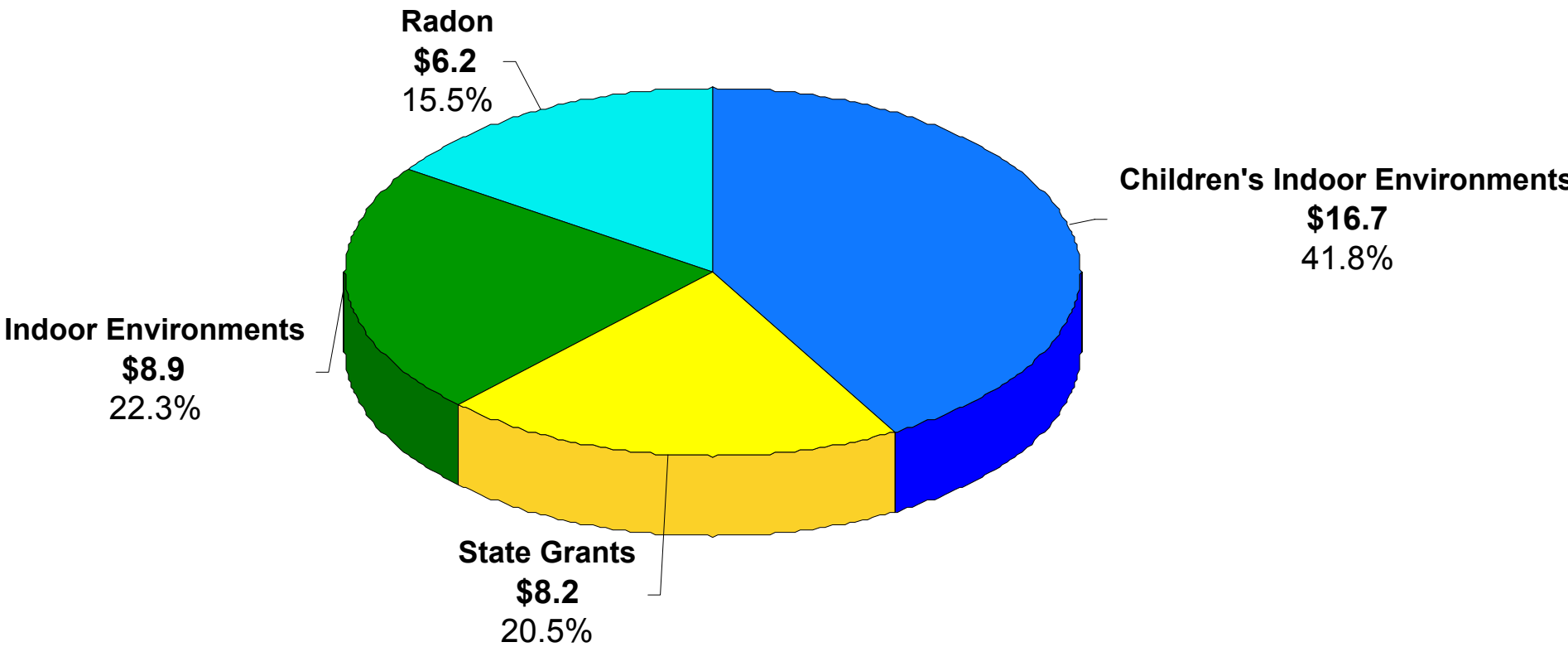
- Eliminating pollution (tons):

-- HC	36,000	-- CO	170,000
-- NO_x	40,000	-- PM	17,800

- EPA funded demonstration projects
  - Partners match funds
- Regulatory incentives

Preventing Pollution & Reducing Risk FY 2004

Dollars in Millions

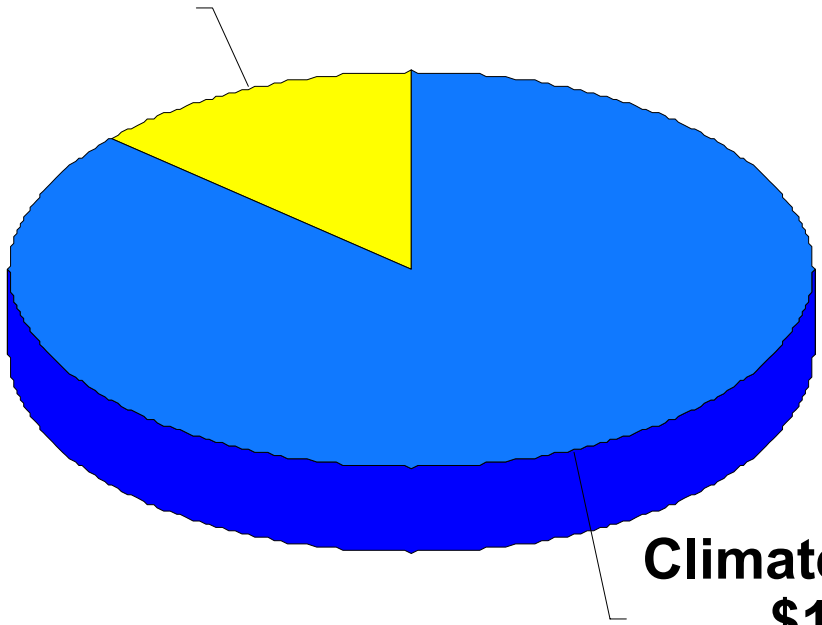


Total Dollars: $39.9

Reduce Global & Cross-Border Environmental Risks
OAR Dollars by Objective
FY 2004

Dollars in Millions

Stratospheric Ozone Depletion
$16.8
13.4%



Climate Change
$108.2
86.6%

Total Dollars: $125.0

Homeland Security Initiatives:

Preparedness, Response, & Recovery

- Proposed activities:
  - Update and expand Environmental Radiation Ambient Monitoring System (ERAMS) to the new Radiation Environmental Monitoring System
  - Develop comprehensive mobile air rapid response laboratories
- Benefits:
  - Expands radiation monitoring from covering 24% of the U.S. population to 60%
  - Establishes capability for monitoring multiple pollutants in response to multiple scenarios and simultaneous events

Protection of EPA Personnel & Infrastructure

- Proposed activities:
  - Upgrade guard services to maintain post-9/11 level of security at high-risk National Vehicle and Fuels Emissions Laboratory (NVFEL) in Ann Arbor
- Benefits:
  - Ensures the safety of people and assets that are vital to the EPA's mission
  - Meets the Agency's goal of safeguarding employees, providing secure facilities, and protecting fixed and mobile assets